AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A material of a positive electrode for a secondary lithium cell, comprising a particulate active material of positive electrode for a secondary lithium-ion cell represented by a general formula, $Li_aCo_bA_cB_dO_eF_f$,

wherein A is magnesium, B is zirconium, $0.90 \leqq a \leqq 1.10$, $0.97 \leqq b \leqq 1.00$, $0.0001 \leqq c \leqq 0.03$, $0.0001 \leqq d \leqq 0.03$, $1.98 \leqq e \leqq 2.02$, $0 \leqq f \leqq 0.02$, and $0.002 \leqq c + d \leqq 0.02$ ~~$0.0001 \leqq c + d \leqq 0.03$~~; the element A, element B and fluorine are evenly present in a vicinity of particle surfaces; a single-component oxide of said element B is 20% or less; and no diffraction peaks are observed at 2θ of 28±1° in a high-sensitivity X-ray diffraction spectrum using Cu-Kα ray.

2. (Previously presented) The material of a positive electrode for a secondary lithium cell according to claim 1, wherein at least a part of said element represented by A or B contained in said particulate active material of the positive electrode for the secondary lithium-ion cell has substituted for cobalt atoms in the particles to form a solid solution.

3. (Previously presented) The material of a positive electrode for a secondary lithium cell according to claim 1, wherein the atomic ratio of said element A to said element B is $0.33 \leqq c/d \leqq 3.00$, provided that $0.002 \leqq c + d \leqq 0.02$.

4-7. (Canceled)

8. (Previously presented) The material of a positive electrode for a secondary lithium cell according to claim 1, wherein said particulate active material of the positive electrode for the secondary lithium-ion cell consists of secondary particles each formed by coagulation of 10 or more primary particles, and an average particle diameter of said secondary particle is from 2 to 20 μm.

9. (Currently amended) A method of producing a material of a positive electrode for a secondary lithium cell comprising a particulate active material of a positive electrode for a secondary lithium-ion cell represented by a general formula, $Li_aCo_bA_cB_dO_eF_f$,

wherein A is magnesium, B is zirconium, $0.90 \leqq a \leqq 1.10$, $0.97 \leqq b \leqq 1.00$, $0.0001 \leqq c \leqq 0.03$, $0.0001 \leqq d \leqq 0.03$, $1.98 \leqq e \leqq 2.02$, $0 \leqq f \leqq 0.02$, and $0.002 \leqq c + d \leqq 0.02$ ~~$0.0001 \leqq c + d \leqq 0.03$~~; the element A, element B and fluorine are evenly present in a vicinity of particle surfaces; a single-component oxide of said element B is 20% or less; and no diffraction peaks are observed at 2θ of 28±1° in a high-sensitivity X-ray diffraction spectrum using Cu-Kα ray; and

wherein ~~the material is~~ a cobalt raw material composed of secondary particles each being formed by coagulation of 10 or more primary particles and ~~a cobalt raw material at least~~ containing at least either cobalt oxyhydroxide or cobalt hydroxide, lithium carbonate, and a raw material comprising said element A and element B are mixed and fired at 850 to 1000 °C.

10. (Currently amended) A material of a positive electrode for a secondary lithium cell, comprising a particulate active material of positive electrode for a secondary lithium-ion cell represented by

a general formula, $Li_aCo_bA_cB_dO_eF_f$, wherein [[()]]A is Al or Mg, B is a group-IV transition element, $0.90 \leqq a \leqq 1.10$, $0.97 \leqq b \leqq 1.00$, $0.0001 \leqq c \leqq 0.03$, $0.0001 \leqq d \leqq 0.03$, $1.98 \leqq e \leqq 2.02$, $0 < f \leqq 0.02$, and $0.002 \leqq c + d \leqq 0.02$ ~~$0.0001 \leqq c + d \leqq 0.03$~~), said element A, element B and fluorine are ~~being~~ evenly present in ~~the~~ a vicinity of ~~the~~ particle surfaces; a single-component oxide of said element B is 20% or less; and no diffraction peaks are observed at 2θ of 28±1° in a high-sensitivity X-ray diffraction spectrum using Cu-Kα ray.